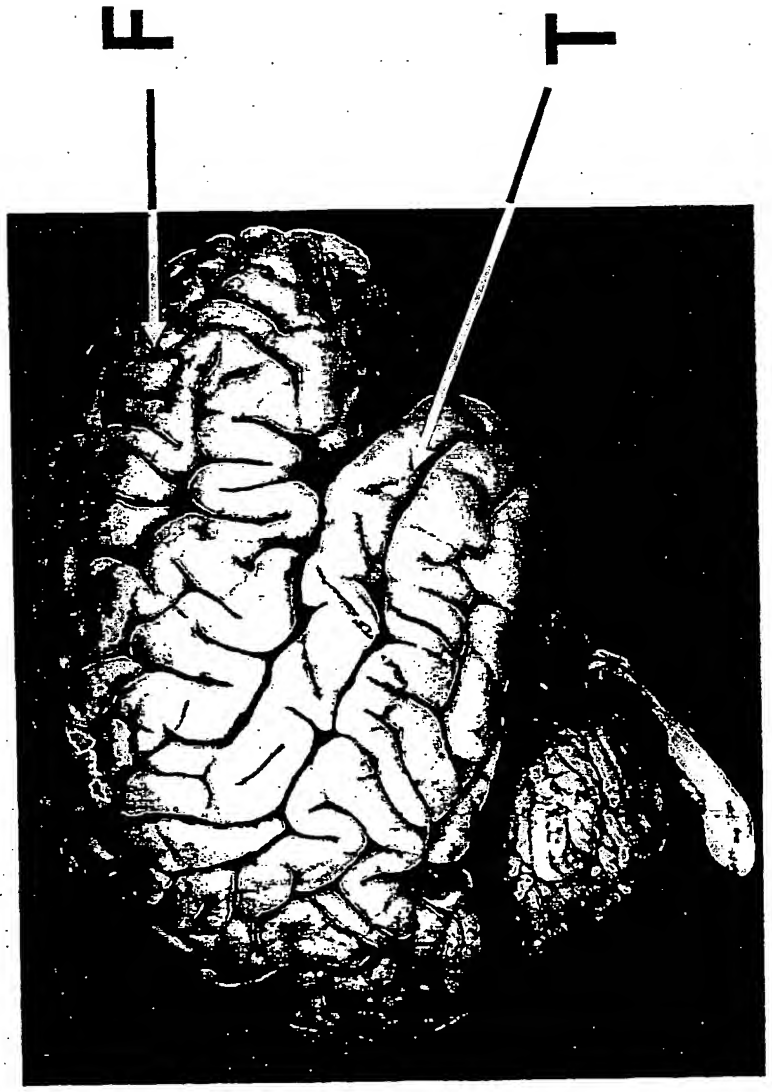


Fig. 1: Identification of Genes Involved in Alzheimer's Disease Pathology

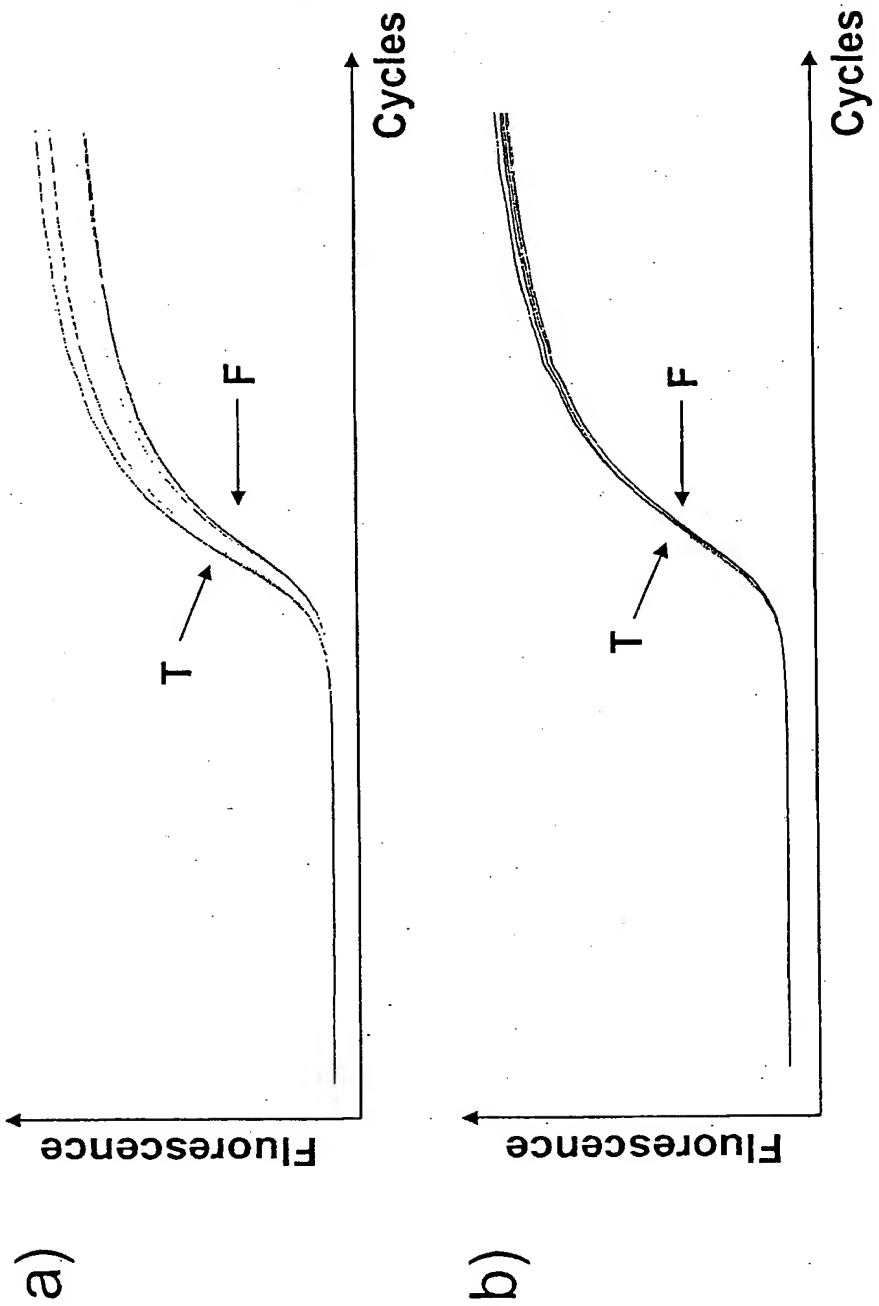


Fig. 2: Verification of differential expression of RAB31 by quantitative RT-PCR

Fig. 3: SEQ ID NO. 1; amino acid sequence of human RAB31 protein

Length: 194 aa

```
  1  MAIRELKVCL LGDTGVGKSS IVCRFVQDHF DHNISPTIGA SFMTKTVPCG
 51  NELHKFLIWD TAGQERFHSL APMYYRGSAA AVIVYDITKQ DSFYTLKKWV
101  KELKEHGPEN IVMAIAGNKC DLSDIREVPL KDAKEYAESI GAIVVETSAK
151  NAINIEELFQ GISRQIPPLD PHENGNNGTI KVEKPTMQAS RRCC
```

Fig. 4: SEQ ID NO. 2; nucleotide sequence of human RAB31 cDNA coding sequence

Length: 585 bp

```
  1  ATGGCGATAC GGGAGCTCAA AGTGTGCCTT CTCGGGGACA CTGGGGTTGG
 51  GAAATCAAGC ATCGTGTGTC GATTTGTCCA GGATCACTTT GACCACAACA
101  TCAGCCCTAC TATTGGGGCA TCTTTTATGA CCAAAACTGT GCCTTGTGGA
151  AATGAACTTC ACAAGTTCCT CATCTGGGAC ACTGCTGGTC AGGAACGGTT
201  TCATTCATTG GCTCCCATGT ACTATCGAGG CTCAGCTGCA GCTGTTATCG
251  TGTATGATAT TACCAAGCAG GATTCATTTT ATACCTTGAA GAAATGGGTC
301  AAGGAGCTGA AAGAACATGG TCCAGAAAAC ATTGTAATGG CCATCGCTGG
351  AAACAAGTGC GACCTCTCAG ATATTAGGGA GGTTCCCCTG AAGGATGCTA
401  AGGAATACGC TGAATCCATA GGTGCCATCG TGGTTGAGAC AAGTGCAAAA
451  AATGCTATTA ATATCGAAGA GCTCTTTCAA GGAATCAGCC GCCAGATCCC
501  ACCCTTGGAC CCCCATGAAA ATGGAAACAA TGGAACAATC AAAGTTGAGA
551  AGCCAACCAT GCAAGCCAGC CGCCGGTGCT GTTGA
```

Fig. 5: SEQ ID NO. 3

Length: 212 bp

```
  1  ACCGTGGACC ACGGCCCTTG GGTCAACAGC ACCGGCGGCT GGCTTGCATG
 51  GTTGGCTTCT CAACTTTGAT TGTTCCATTG TTTCCACTTT CATGGGGGTC
101  CAAGGGTGGG ATCTGGCGGC TGATTCCTTG AAAGAGCTCT TCGATATTAA
151  TAGCATTTTT TGCACTTGTC TCAACCACGA TGGCACCTAT GGATTCAGCG
201  TATTCCTTAG CA
```

Fig. 6: Alignment of SEQ ID NO. 3 with human RAB31 cDNA

Length: 212 bp

```
212 TGCTAAGGAATACGCTGAATCCATAGGTGCCATCGTGGTTGAGACAAGTG 163
    ||||||||||||||||||||||||||||||||||||||||||||||||||
527 TGCTAAGGAATACGCTGAATCCATAGGTGCCATCGTGGTTGAGACAAGTG 576

162 CAAAAAATGCTATTAATATCGAAGAGCTCTTTCAAGGAATCAGCCGCCAG 113
    ||||||||||||||||||||||||||||||||||||||||||||||||||
577 CAAAAAATGCTATTAATATCGAAGAGCTCTTTCAAGGAATCAGCCGCCAG 626

112 ATCCCACCCTTGGACCCCCATGAAAGTGGAAACAATGGAACAATCAAAGT 63
    ||||||||||||||||||||||| |||||||||||||||||||||||||
627 ATCCCACCCTTGGACCCCCATGAAAATGGAAACAATGGAACAATCAAAGT 676

 62 TGAGAAGCCAACCATGCAAGCCAGCCGCCGGTGCTGTTGACCCAAGGGCC 13
    ||||||||||||||||||||||||||||||||||||||||||||||||||
677 TGAGAAGCCAACCATGCAAGCCAGCCGCCGGTGCTGTTGACCCAAGGGCC 726

 12 GTGGTCCACGGT 1
    ||||||||||||
727 GTGGTCCACGGT 738
```

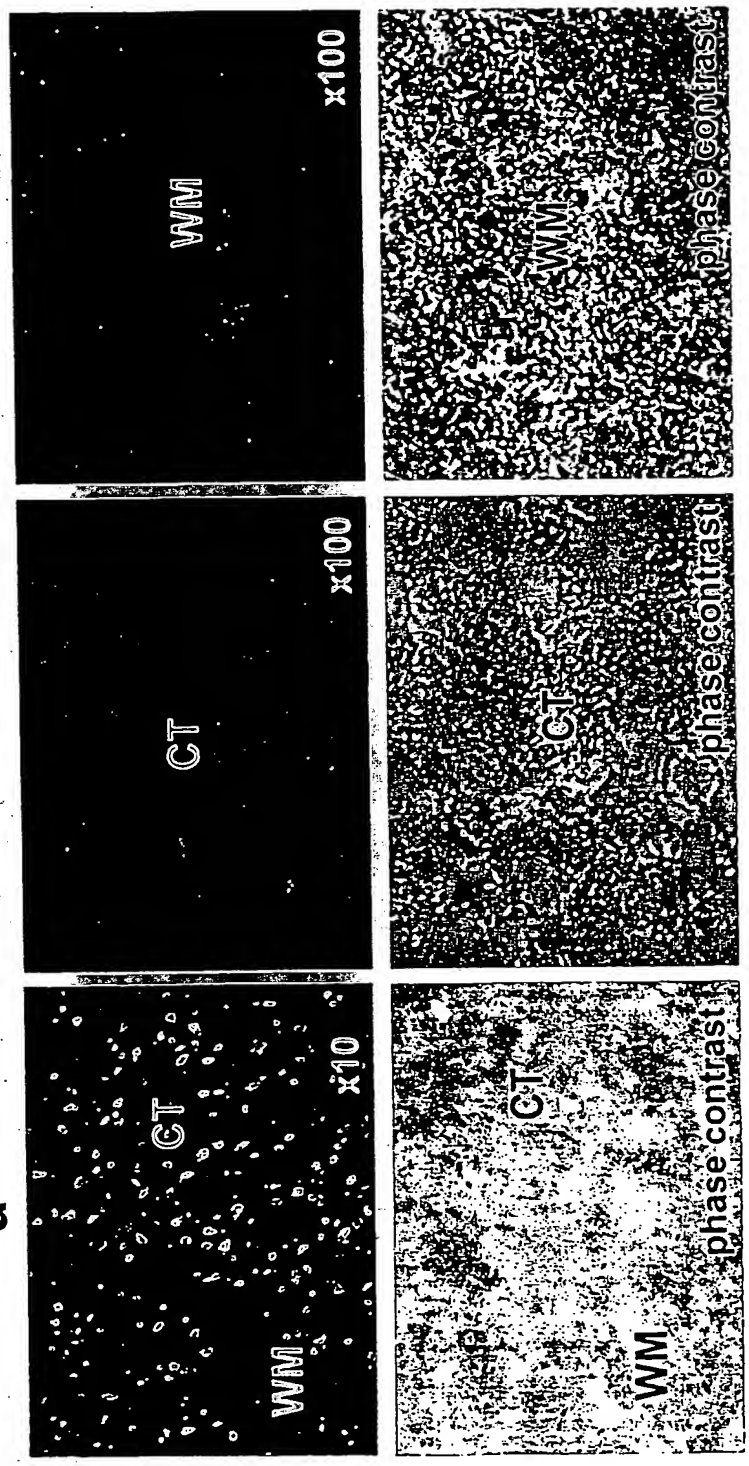
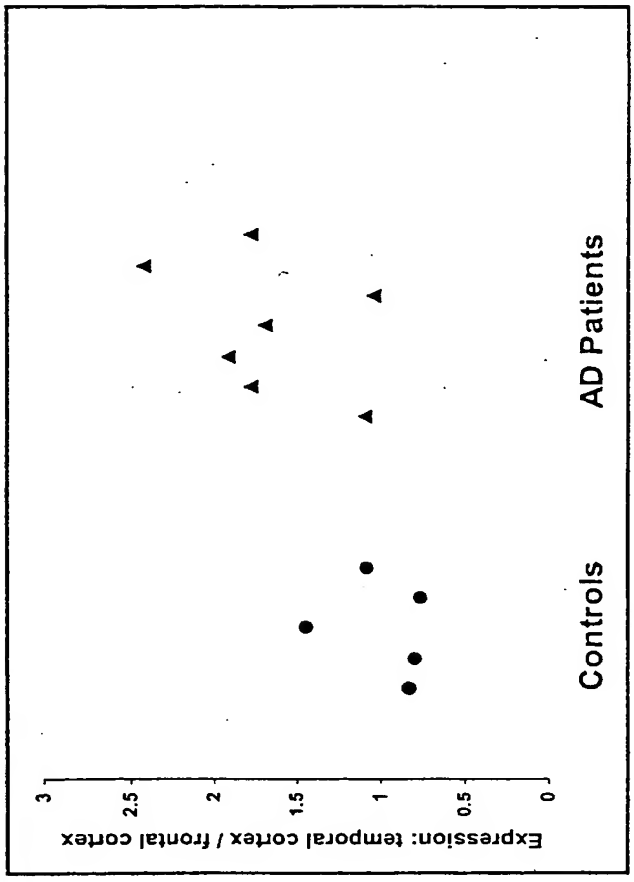


Fig. 7: Images of human cerebral sections labeled with anti-RAB31 antiserum and with DAPI

Fig.8: Identification of differentially expressed genes in microarray hybridization experiments

Biochip	Type of probe	Used probes (Cy5- / Cy3-labeled)	Ratio fluorescence intensity: temporal / frontal cortex
1	C	$PT_{SSH(2)}$ / $PF_{SSH(1)}$	1.61
2	B	PT / PF	1.74



sample	Δ (fold) (temporal / frontal cortex)
control C011	0.83
control C012	0.80
control C014	1.45
control C005	0.77
control C008	1.08
patient P012	1.10
patient P016	1.78
patient P010	1.91
patient P011	1.69
patient P014	1.04
patient P017	2.43
patient P019	1.78

Fig.9